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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,775	08/25/2003	Masaaki Hara	NIT-394	1105

7590 02/24/2006  
MATTINGLY, STANGER & MALUR, P.C.  
SUITE 370  
1800 DIAGONAL ROAD  
ALEXANDRIA, VA 22314

EXAMINER
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LOVEL, KIMBERLY M

ART UNIT	PAPER NUMBER
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2167

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/646,775	HARA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Kimberly Lovel	2167	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 August 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>8/25/2003</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Status***

1. Claims 1-12 are pending.
2. Claims 1-12 are rejected.

### ***Priority***

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Suggestions***

4. Claims 1-5 and 11-12 recite the step of "memorizing." It is suggested that the applicant alter the terminology in claims 1-5 and 11-12 to recite "storing in memory" in order to conform with the conventional terminology used in the art.

### ***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 2, 6 and 10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 2 is directed to a "program," which is software per se. Software is considered to be nonstatutory subject matter because it does not fall into any of the four statutory categories of invention.

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Claim 6 is directed to a “computer-based document retrieval method.” In order for a method claim to represent statutory subject matter, the claimed method must produce a useful, concrete and tangible result. The end result of the method is performing a document search. The process of searching in itself does not produce a tangible result.

Claim 10 is directed to a “computer-based document retrieval method.” In order for a method claim to represent statutory subject matter, the claimed method must produce a useful, concrete and tangible result. The end result of the method is performing a second search. The process of searching in itself does not produce a tangible result.

To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-3 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by US PGPub 2004/0102958 to Anderson (hereafter Anderson).

**Claim 1:**

Referring to claim 1, Anderson discloses a computer-based document retrieval method, comprising the steps of:

receiving a seed document entered by a user (see paragraph [0056], lines 1-7; paragraph [0071], lines 1-5; and Fig 6, item 641 – according to page 1, line 23 – page 2, line 2 of the applicant's specification, a seed document is a document that is used to perform a search);

memorizing first characteristic terms extracted from said seed document (see paragraph [0031] and Fig 7, item 700 – the document is portioned into paragraphs; the paragraphs are considered to represent the extracted characteristic terms; item 700 in Fig 7 is considered to be the first characteristics terms);

memorizing second characteristic terms extracted from the result of a document search process performed on said seed document (see paragraphs [0033]-[0034] – the paragraph returned as a possible match from the Compare Possible Matching Paragraphs step is considered to represent the second characteristic terms; item 706 of Fig 7 is considered to be the second characteristic terms); and

displaying the difference between said first characteristic terms and said second characteristic terms on screen (see paragraphs [0033]-[0037] and Fig 7 – Fig 7, item 703 displays the difference between item 700 and item 706).

Anderson uses the Unix Diff command to determine the differences between the characteristic terms from the inputted document and the characteristic terms of the return document (see paragraph [0035], lines 14-16). The book *Practical Unix* by Maritsugu et al defines the Unix diff command as showing the difference between two files (see Chapter 10: Comparing, Sorting, Modifying, Combining, and Splitting Files, Section: Comparing Files). Therefore, it is inherent that the characteristic terms from the inputted document and the characteristic terms of the return document must be stored in memory (file) in order for Anderson to use the Unix Diff command since the definition requires for two files to be compared.

**Claim 2:**

Anderson also discloses a program for executing a method for electronic document retrieval (see paragraph [0073]). Therefore the program of claim 2 is rejected on the same grounds as the computer-based document retrieval method of claim 1.

**Claim 3:**

Anderson also discloses an electronic document retrieval system with a means for receiving, a means for memorizing and a means for displaying (see paragraph [0073] – the hardware and software combination is considered to provide the means for receiving, memorizing and displaying). Therefore, the system of claim 3 is rejected on the same grounds as the method of claim 1.

**Claim 12:**

Anderson also discloses a computer-readable storage medium storing a program for executing a computer-based document retrieval method (see paragraph [0073]). Therefore, the computer-readable storage medium of claim 12 is rejected on the same grounds as the method of claim 1.

9. Claim 6 is rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No 5,926,811 to Miller et al (hereafter Miller et al).

**Claim 6:**

Referring to claim 6, Miller et al disclose a computer-based document retrieval method (see abstract), comprising the steps of:

causing thesaurus category information, which is stored in a storage device beforehand, to appear on screen (see column 3, line 62 – column 4, line 2 – the operation is caused by the end-user of the system; see column 4, lines 54-69 – when a search is performed on a topic that has been previously searched, the collection of documents that has already been built is searched);

receiving a user's instruction for selecting said displayed thesaurus category information (see column 4, lines 5-7 – the user selects which concepts to include within the query); and

performing a document search process in accordance with the received instruction for selecting said thesaurus category information (see column 4, lines 7-8 – running the query is considered to represent performing a document search process).

10. Claims 5 and 10-11 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No 6,728,706 to Aggarwal et al (hereafter Aggarwal et al).

**Claim 5:**

Referring to claim 5, Aggarwal et al discloses a computer-based document (a document is considered to be any text or images returned by the retrieval method) retrieval method, comprising the steps of:

displaying characteristic terms extracted from the result of a document search process on screen (see column 4, lines 3-19 and column 11, lines 60-61 – the user computer system contains a video display);

receiving a user's instruction for selecting said displayed characteristic terms (see column 4, lines 9-11 – the relevance feedback is considered to represent the user's instruction); and

memorizing the received instruction for selecting said characteristic terms (see column 9, lines 34-52 – the method stores the user feedback information).

**Claim 10:**

Referring to claim 10, Aggarwal et al discloses a computer-based document (a document is considered to be any text or images returned by the retrieval method) retrieval method, comprising the steps of:

receiving first characteristic terms entered by a user (see column 4, lines 3-5 – the query entered by the user is considered to represent the first terms);



performing a first search process on said first characteristic terms and displaying the result of said first search process on screen (see column 4, lines 6-8; column 11, lines 60-61 – the user computer system contains a video display);

receiving second characteristic terms which are entered by the user in accordance with the displayed result of said first search process (see column 4, lines 9-12 – the second terms are selected by the user based on relevance feedback);

comparing said first characteristic terms and said second characteristic terms (see column 4, lines 13-19 and column 9, lines 37-49); and

performing a second search process in accordance with the result of said comparison (see column 4, lines 13-19).

**Claim 11:**

Referring to claim 11, Aggarwal et al discloses the document (a document is considered to be any text or images returned by the retrieval method) retrieval method according to claim 10, wherein said second search process performed in accordance with the result of said comparison comprises the steps of:

memorizing, as third characteristic terms, the characteristic terms that are not listed as said first characteristic terms but are listed as said second characteristic terms (see column 4, lines 13-19 and column 10, lines 29-40 – in each iteration the search results are treated as if they were the first set of results);

assigning relatively great weights to said third characteristic terms (see column 10, lines 53-63 – the first iteration receives equal weight, however the following iterations receive altered weights); and

performing said second search process in accordance with said second characteristic terms and said third characteristic terms (this step is considered to represent refining the search once again – see column 10, lines 29-40).

***Claim Rejections - 35 USC § 103***

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 4 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PGPub 2004/0102958 to Anderson in view of US Patent No 6,728,706 to Aggarwal et al.

**Claim 4:**

Anderson teaches a computer-based document retrieval method. In particular, Anderson discloses a computer-based document retrieval method, comprising the steps of:

memorizing first characteristic terms extracted from the result of a first search process (see paragraphs [0033]-[0034] – item 706 of Fig 7 is considered to be the second characteristic terms);

memorizing second characteristic terms extracted from the result of a second search process which is performed on the result of said first search process;

comparing said first characteristic terms and said second characteristic terms (see paragraphs [0033]-[0037] and Fig 7); and

displaying the result of said comparison on screen (see paragraphs [0033]-[0037] and Fig 7 – Fig 7, item 703 displays the difference between item 700 and item 706).

Anderson uses the Unix Diff command to determine the differences between the characteristic terms from the inputted document and the characteristic terms of the return document (see paragraph [0035], lines 14-16). The book *Practical Unix* by Maritsugu et al defines the Unix diff command as showing the difference between two files (see Chapter 10: Comparing, Sorting, Modifying, Combining, and Splitting Files, Section: Comparing Files). Therefore, it is inherent that the characteristic terms from the inputted document and the characteristic terms of the return document must be stored in memory (file) in order for Anderson to use the Unix Diff command since the definition requires for two files to be compared.

Anderson fails to teach the further limitation wherein a second search is performed on the results of the first search. Aggarwal et al teaches the method of searching a database including the further limitation of performing a second search on the result of the first search (see column 3, line 60 – column 4, line 19 – section (b) and (c) describes the user performing a first search and the displaying of the first set of results; section (d) describes receiving user feedback from the first set of results; section (e) describes providing the user with a refined set of results).

It would have been obvious to one of ordinary skill at the time the invention was to utilize Aggarwal et al's method of refining a search with Anderson's method of document retrieval. One would have been motivated to do so in order to retrieve documents that would increase the efficiency of retrieving documents that describe the users request (Anderson: see paragraph [0011]).

**Claim 7:**

Anderson teaches a computer-based document retrieval method. In particular, Anderson discloses a computer-based document retrieval method, comprising the steps of:

receiving first characteristic terms from a user (see paragraph [0056], lines 1-7; paragraph [0071], lines 1-5; and Fig 6, item 641 – the document is considered to represent the first characteristic terms);

performing a search process on said first characteristic terms and displaying the result of said search process on screen (see paragraphs [0033]-[0034] – item 706 of Fig 7 is considered to represent the results);

receiving second characteristic terms which are entered by the user in accordance with the result of said search process;

comparing said first characteristic terms and said second characteristic terms (see paragraphs [0033]-[0037] and Fig 7); and

displaying the result of said comparison on screen (see paragraphs [0033]-[0037] and Fig 7 – Fig 7, item 703 displays the difference between item 700 and item 706).

Anderson fails to teach the further limitation wherein a second search is performed on the results of the first search. Aggarwal et al teaches the method of searching a database including the further limitation of performing a second search on the result of the first search (see column 3, line 60 – column 4, line 19 – section (b) and (c) describes the user performing a first search and the displaying of the first set of results; section (d) describes receiving user feedback from the first set of results; section (e) describes providing the user with a refined set of results).

It would have been obvious to one of ordinary skill at the time the invention was to utilize Aggarwal et al's method of refining a search with Anderson's method of document retrieval. One would have been motivated to do so in order to retrieve documents that would increase the efficiency of retrieving documents that describe the users request (Anderson: see paragraph [0011]).

**Claim 8:**

Referring to claim 8, the combination of Anderson and Aggarwal et al (hereafter Anderson/Aggarwal) discloses a document retrieval support method according to claim 7, wherein displayed characteristic terms classified solely as said second characteristic

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terms are differentiated from the other characteristic terms when said first characteristic terms and said second characteristic terms are compared (Anderson: see paragraph [0037] and Fig 7, item 703 – the terms that are solely second characteristic terms are differentiated by double underscored text).

**Claim 9:**

Referring to claim 8, Anderson/Aggarwal discloses the document retrieval support method according to claim 7, wherein characteristic terms classified solely as said second characteristic terms are assigned an increased weight setting when said first characteristic terms and said second characteristic terms are compared (Aggarwal: see column 9, lines 27-63).

***Conclusion***

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly Lovel whose telephone number is (571) 272-2750. The examiner can normally be reached on M-F from 7:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jean Homere, can be reached on (571) 272-3780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kimberly Lovel  
Examiner  
Art Unit 2167

kml  
17 February 2006

Jean R. Homere  
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